above the opening for the admission of the steam. The can will hold six half-bushel bags, or three bushels of soil. Four quarts of water are placed in the pan, the tight-fitting cover is put on, and the pipe for conducting the steam to the can attached. (See figure at left.) The gas or oil stove is lighted and the steam begins to form in about five minutes. The apparatus will evaporate about four quarts or eight pounds of water in an hour. This is equal to nearly a fourth-horse-power boiler. It requires about three hours of steaming with the apparatus to bring about the desired results in the soil. For the last half hour of the steaming the temperature of the soil inside the bags runs from 75° to 80° C. It is necessary to keep adding water to the pan, as the best results in steaming are secured when about four quarts of water or less are in the receptacle. The contrivance could easily be made so that the water of condensation returns to the pan. Extreme simplicity is the chief consideration, however, so that the return of the water is not regarded as important. The condensed water remains in the bottom of the can or runs out of the hole for the admission of the steam pipe. The leakage of steam around this hole is negligible. Soil treated in this apparatus does not become water-logged and in every respect is as good as that from any of the other devices we have used. For field and laboratory purposes, for small growers with frames and greenhouses, and for others who may be desirous of producing clean, strong, healthy plants, this apparatus will be found useful and convenient, especially where gas is not at hand. The apparatus may be used for sterilizing dishes and other appliances and could be utilized for cooking and canning. With a two-burner blue flame oil stove, one gallon of kerosene will run the apparatus for eight hours and will evaporate thirty to thirty-two quarts of water at an expense of fifteen cents. This means the treatment of seven to nine bushels of soil at a total cost of about fifteen cents, or about two cents per bushel. Using a two-burner gas stove it requires 200 cubic feet of gas for eight hours, costing fifteen cents, to evaporate thirty-two quarts of water. It will be noted, therefore, that the cost of oil and gas is practically the same on the basis of fifteen cents a gallon for kerosene and seventy-five cents per thousand cubic feet for gas.